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NOTICE OF ALLOWANCE AND FEE(S) DUE

24045

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11/18/2009

PARKER-HANNIFIN CORPORATION HUNTER MOLNAR BAKER MORGAN 6035 PARKLAND BOULEVARD CLEVELAND, OH 44124-4141 EXAMINER

COSIMANO, EDWARD R

ART UNIT PAPER NUMBER

2863

DATE MAILED: 11/18/2009

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Ī	10/551,853	09/21/2006	Gerd Scheffel	2802-897-001 US	6150

TITLE OF INVENTION: SYSTEM FOR DETECTING AND TRANSMITTING TEST DATA FROM A PRESSURE CHAMBER FILLED WITH A

HIGH-PRESSURE FLUID

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/18/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 24045 7590 11/18/2009 Certificate of Mailing or Transmission PARKER-HANNIFIN CORPORATION I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. **HUNTER MOLNAR BAKER MORGAN** 6035 PARKLAND BOULEVARD CLEVELAND, OH 44124-4141 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/551,853 09/21/2006 Gerd Scheffel 2802-897-001 US 6150 TITLE OF INVENTION: SYSTEM FOR DETECTING AND TRANSMITTING TEST DATA FROM A PRESSURE CHAMBER FILLED WITH A HIGH-PRESSURE FLUID APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 02/18/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS COSIMANO, EDWARD R 2863 702-127000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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24045 75	590 11/18/2009		EXAM	INER
PARKER-HANNIFIN CORPORATION HUNTER MOLNAR BAKER MORGAN			COSIMANO, EDWARD R	
			ART UNIT	PAPER NUMBER
6035 PARKLAND CLEVELAND, OF			2863	
CLL VLLAND, OI	1 77127 7171		DATE MAILED: 11/18/2009	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 351 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 351 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)		
	10/551,853	SCHEFFEL, GERD		
Notice of Allowability	Examiner	Art Unit		
	Edward R. Cosimano	2863		
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS		
1. \boxtimes This communication is responsive to <u>the amendment filed</u> of	06 August 2009.			
2. X The allowed claim(s) is/are <u>1-16</u> .				
 3. Acknowledgment is made of a claim for foreign priority unanal All b) Some* c) None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Application No			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements		
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give				
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.				
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached				
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date				
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t				
6. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT				
Attachment(s)	5. Making of Informal D	ataut Application		
 Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) 	5. ☐ Notice of Informal Page 16. ☐ Interview Summary			
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Dat 7. ⊠ Examiner's Amendn	e		
Paper No./Mail Date4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	nt of Reasons for Allowance		
of Biological Material	9.			

1. EXAMINER'S COMMENT

- 1.1 When preparing this Office action the examiner considers the instant application to include:
 - A) the Oath/Declaration filed on 21 September 2006 which is acceptable to the examiner;
 - B) the amended Abstract filed on 03 October 2005 which is acceptable to the examiner;
 - C) figures 1, 2, 3 & 4 of the set of drawings containing 2 sheets of 4 figures comprising figures 1, 2, 3 & 4 as presented in the set of drawings filed on 18 March 2009 where the content of figures 1, 2, 3 & 4 of the above set of drawings is acceptable to the examiner;
 - D) the written description as filed on 03 October 2005 and amended on 03 October 2005 and amended on 18 March 2009; and
 - E) the set of claims as filed on 06 August 2009.
- 1.2 Applicant's claim for the benefit of an earlier filing date pursuant to 35 U.S.C. 365(c) and 35 U.S.C. 371 are acknowledged.
- 1.3 Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 1.4 The examiner has considered the prior art cited in the base applications.
- 1.5 The examiner has approved the proposed changes to figures 1, 2, 3 & 4 of the drawings as filed on 18 March 2009.
- 2. RESPONSE TO APPLICANT'S ARGUMENTS
- 2.1 The objections and rejection that have not been repeated here in have been over come by applicant's last response.
- 3. REASONS FOR ALLOWANCE
- 3.1 The following is a statement of reasons for the indication of allowable subject matter:
 - A) the prior art, for example:
 - (1) either Tate (5,159,525 or 5,343,757) discloses a machine/process that provides the useful and beneficial function of sensing the pressure with in an enclosed space in which a pressure sensing element that is exposed to the pressure

with in the enclosed space. The sensed pressure may then be monitored outside of the enclosed space by using electrical conductors and electrical contacts that are connected between the pressure sensing element with in the enclosed space and the out side monitoring equipment.

- (2) either Kremidas (5,174,158 or 5,224,384 or 5,303,593 or WO 94/10548 A1 or 5,317,920 or 5,319,980) discloses a machine/process that provides the useful and beneficial function of sensing the pressure with in an enclosed space defined by an enclosure structure in which a pressure sensing element, that is mounted on a circuit board that has been clamped between the two halves of the enclosure structure, is exposed to the pressure with in the enclosed space. The sensed pressure may then be monitored outside of the enclosed space by using electrical conductors and electrical contacts that are connected between the pressure sensing element with in the enclosed space and the out side monitoring equipment.
- (3) either Mast et al (2004/0200286 or 7,363,819) disclose a machine/process that provides the useful and beneficial function of detecting and transmitting test data from within a pressurized housing comprising a pressure chamber that is filled with a homogeneously pressurized high-pressure fluid to the outside environment using conductors printed on a circuit board between a sensing element within the pressure chamber to electrical contacts located outside of the pressure chamber. In this machine/process it is noted that both faces of circuit board are subjected to the ambient pressure with in the pressure chamber and at least one portion of the circuit board extends from with in the pressurized chamber to the outside of the housing via two halves of the housing that when sealed clamp and support the circuit board between the two halves of the housing that encloses the pressure chamber.
- B) however, the prior art does not fairly teach or suggest in regard to claim 1 a machine in claim 1 that provides the useful and beneficial function of externally accessing sensing data/information obtained by a sensing element that is enclosed with in

a pressurized space by providing structures in claim 1 that perform at least the functions of:

- (1) enclosing a sensing element contained on at least part of a printed circuit board (PCB) within the enclosed homogeneously pressurized chamber of a pressurized housing by clamping the PCB between the two halves of the housing in such a fashion that:
 - (1a) both sides of the sensing element are exposed to the pressure within the homogeneously pressurized chamber of a pressurized housing;
 - (1b) at least part of the PCB extends both within homogeneously pressurized chamber of a pressurized housing and extends outside of the pressurized housing; and
 - (1c) the radial forces that are exerted on the PCB when the PCB is under pressure are absorbed; and
- (2) using printed strip conductors on the PCB that extend on the PCB from the sensing element that is located within homogeneously pressurized chamber of a pressurized housing to a contact point that is on the outside of the pressurized housing.

Claims 2-16, which depend from claim 1, are allowable for the same reason.

4. CONCLUSION

- 4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward R. Cosimano whose telephone number is 571-272-0571. The examiner can normally be reached on 571-272-0571 from 7:30am to 4:00pm (Eastern Time).
- 4.2 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/551,853 Page 5

Art Unit: 2863

4.3 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ERC 11/14/2009

/Edward Cosimano/ Primary Examiner Unit 2863